

[METHOD AND SYSTEM FOR OPTIMIZING THE DESIGN OF A MECHANICAL SYSTEM]

Abstract of Disclosure

The method and system of the present invention allow a designer of a mechanical system to quickly and easily determine the optimal design for the system. The steps include creating models of the mechanical system and simulating the performance of the models to achieve a set of results. From these results, Response Surface Models can be determined. These Response Surface Models act as surrogates for the more complex models of the mechanical system, and can be used to optimize the performance of the system. If necessary or desired, these Response Surface Models can be optimized over a range of possible values for the design parameters to achieve a robust design.

10064173.061802

Figures

2023-09-27 10:06:43